

THE DER WEEKLY

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Industry News

CA PUC Approves Edison Deal with Alternative Energy Generators

Southern California Edison reached an agreement with alternative power producers on June 12 in an effort to stabilize prices and pay part of its debt to the small generators. The deal calls for an end to litigation by the alternative generation companies, a payment from Edison to the generators of 10 percent of its debt (for electricity produced between November 1, 2000, and March 27, 2001), a 7 percent annual interest payment by Edison on the debt, and a five-year fixed-rate of \$53.70 per MWh that Edison will pay the companies. Once Edison restores its credit-worthiness, it will make another 10 percent payment to the alternative energy producers. Also under the agreement, Edison will pay its entire balance five days after it receives funds to pay off its debts.

On June 13, the California Public Utilities Commission (CA PUC) gave permission for the utilities to change their contracts and specifically suggested the five-year contracts for fixed rates. The PUC also approved the agreement between Edison and the alternative power producers, but the settlements are contingent upon Governor Davis' deal to rescue the utility from near-bankruptcy. The legislation for this must be passed by the state legislature, and according to the *Los Angeles Times* it has very little support in either chamber. Only about one-half of the small generators are affected by this agreement, as approximately 300 companies providing power to Pacific Gas & Electric and San Diego Gas & Electric still have not come to an agreement. [Los Angeles Times, June 13](#) and [14](#)

Fuel Cell Technologies Receives Two New POs

Fuel Cell Technologies (FCT) has received two new purchase orders (POs) to supply and install two 5-kW solid oxide fuel cells (SOFC). One will be delivered to The Presidio Trust in San Francisco, and the other will be delivered to the National Fuel Cell Research Center at the University of California at Irvine. FCT is working toward the commercialization of its

SOFC for stationary applications, and the installation of demonstration units will continue throughout 2002. FCT has also entered a joint development agreement with Siemens Westinghouse Power Corporation for the SOFC component. [Fuel Cell Technologies Press Release](#), June 11

Batch of Solar Panels at CA Jail Switched On

The solar panels being installed on the rooftops of the Alameda County Santa Rita Jail were previewed by the county supervisors on June 12 (see [The DER Weekly, February 23](#) issue for more information). The first batch of panels were switched on last week and generated approximately 65 kW of power. When the project is completed in July, about 5,000 panels will have been installed. [PR Newswire](#), June 12

GE, Honeywell Merger Appears Dead

General Electric Co.'s (GE) deal for Honeywell appears to be in peril as the company and European regulators remain far apart on concessions. On June 14, GE submitted a final offer of concessions to the European Commission, the European Union's executive arm. Yet both GE and European regulators say that they still remain far apart. In one of the possible scenarios, GE and Honeywell could withdraw their application prior to the commission issuing a formal decision on the deal, theoretically opening the door for the two companies to resubmit their deal for approval at a later stage. However, since any new merger plan must be substantially different from the one withdrawn, it is highly unlikely that GE and Honeywell will pursue this option. *The Wall Street Journal*, June 15

Internet Through Medium-Voltage Power Lines

Cisco Systems Inc., a San Jose California computer networking company, and two other companies are funding Amperion Inc., a web-access start-up company. Cisco, along with American Electric Power Co., a Columbus Ohio energy provider, and Redleaf Group Inc., a technology operating company, is aggregating \$12.5 million to fund Amperion. The company plans to use medium-voltage power lines to deliver high-speed Internet access to homes and businesses. Several companies currently use low-voltage wiring in homes and buildings; however, the idea of using medium-voltage lines as a means of connecting people to the Internet is novel. Amperion says that the service will allow augment high-speed Internet access in rural areas. *The Wall Street Journal*, June 11

GM Moves on Fuel Cell Vehicles

General Motors Corp. (GM) purchased a 15% stake in General Hydrogen Corp. in an effort to start mass producing fuel cell-

(Continued on page 2)

In This Issue:

- ▶ Industry News
- ▶ Policy News
- ▶ By the Numbers
- ▶ Power Crunch: White House Climate Change Report
- ▶ DOE News
- ▶ Calendar of Events

According to a report prepared for the American Public Power Association, a distributed generation model was the first stage of development of the electric power industry.*

powered vehicles by 2010. The alliance between the world's largest vehicle manufacturer and the fuel-cell technology company will focus on hydrogen storage, fuel cell vehicle refueling, and energy services. GM announced it expects to have a hydrogen vehicle prototype within two to three years. According to the companies, the biggest obstacle will be making the vehicle affordable. *The Wall Street Journal*, June 14



Policy News

House Interior Appropriations Increase DER

The U.S. House of Representatives Interior Appropriations Committee held a mark-up on June 7 and increased distributed energy resources appropriations by \$16.5 million over the budget request. Language attached to the legislation stated that the Department of Energy needs to provide more specific funding for DER technologies activities in the future and that research on thermally activated technologies for packaged cooling, heating, and power systems should be accelerated. The House Energy and Water Development Appropriations Subcommittee is preparing to mark up their FY 2002 Appropriations bill, most likely before the July 4 recess.

NY Governor Orders Renewables Purchases

New York Governor George Pataki unveiled an executive order June 10 that requires state facilities to purchase at least 10 percent of their energy needs from renewable sources by 2005, and 20 percent by 2010. The order applies to state buildings and quasi-independent agencies such as the State University of New York and the Metropolitan Transportation Authority. Also part of the mandate is a requirement that the state adhere to strict energy efficiency standards when it constructs buildings or significantly renovates existing structures. During the same statement Governor Pataki announced the members of a task force charged with developing policy recommendations for greenhouse gas emissions and global warming and renewed his call for federal emissions standards for older power plants. [New York Times](#), [Reuters](#), June 11; *EREN Network News*, June 13

Nevada Governor Signs Green Power Bill

Nevada Governor Kenny Guinn signed SB 372 on June 8, enacting legislation that requires utilities to purchase more green power. Under the new law, Nevada Power Company and Sierra Pacific Power Company will have to generate 5 percent of their power from renewables by 2003 and increase that number by 2 percentage points every other year. By 2013, the utilities must generate 15 percent of their power from renewable sources. The two utilities are permitted to combine their generation assets to meet the requirements, and currently they produce a total of 3 percent of their power from green sources. [Las Vegas Review-Journal](#), June 9



By the Numbers

Texas is 99% self-sufficient in terms of its electricity supply.

Since 1995, 22 new plants totaling 5,700 MW in generating capacity have been commissioned in Texas.

Another 15 plants capable of producing 10,000 MW are expected to be online by the time Texas enters full-scale competition in January, 2002.

The new plants will provide more than enough generating capacity to meet peak demand and provide at least a 15% reserve for the next few years.

Source: "UpFront News & Views," *Global Energy Business*, March/April 2001.



Power Crunch

White House Climate Change Report

The White House recently released its report on climate change, which includes initial findings, summaries of current U.S. actions, and proposals to advance science and technologies to address climate change.

The Cabinet-level climate change working group recognized Federal programs that promote greenhouse gas reductions, specifically mentioning the **Combined Heat and Power (CHP) Challenge** and its goal of doubling U.S. CHP power capacity by 2010. The report states that it is critical to enhance the role of private-public partnerships to advance this technology. It also discussed the government's support of **renewable energy sources** such as solar, wind, geothermal, hydropower, biopower, and hydrogen.

The report refers to recommendations included in the National Energy Policy as means to address climate change, including focusing R&D development efforts on integrating current programs regarding **hydrogen, fuel cells, and distributed energy**.

Advancing technology as a means to address climate change includes suggestions to promote **cutting-edge technologies**. Technologies mentioned in this section include geothermal power plants and **fuel cells**, which "hold great promise for reducing emissions." The report states that "innovative demonstration projects will reduce the high cost of this technology and offer a great potential to meet our energy needs." The climate change working group report follows with a recommendation to fund demonstration projects for cutting-edge technologies.

The climate change report is available at www.whitehouse.gov.

Continued on page 3

DER Discussed at ASME Events

At the ASME Turbo Expo: Land, Sea and Air 2001 in New Orleans, Louisiana, on June 4-7, Debbie Haught, Office of Distributed Energy Resources, and Jill Jonkouski, Chicago Operations, chaired a panel session on microturbines. Representatives from Honeywell, United Research Center, Bowman Power Systems, Capstone Turbine, Elliott Energy Systems, and Turbec spoke about their current microturbine products and future advances. Additionally, Debbie Haught gave a presentation about the OPT DER in one of the sessions on Distributed Power Generation Systems. On June 7, at the ASME 2001 International Joint Power Generation Conference & Exposition also in New Orleans, Debbie Haught gave an invited plenary presentation on Advanced Power Generation Systems, highlighting the OPT portfolio of programs.

Digital Future Analyzed at DOE Headquarters

Four scenarios for the future digital society were discussed in a presentation by Wally Baer of the RAND Corporation, on June 12 at DOE's Forrestal Headquarters in Washington, DC. The detailed scenarios ranged from a highly distributed 'Cybertopia' to a centralized and regulated net dominated by large corporate entities. Applications such as smart homes, addressable appliances, smart medical devices, and net-commerce were considered. Negative trends are the vulnerability to cyber-crime and the "digital divide" between those who participate in the net culture and those who are left out. The RAND study is supported by DOE in the context of the Office of Power Technology's Analysis program. It will analyze energy needs of the digital society in 2020 with respect to availability and reliability and identify research requirements for the new infrastructure.



CALENDAR OF EVENTS

JUNE 2001

Date	Event	Location	Other Information
18-20	APPA National Conference	Washington, DC	www.appanet.org
20-22	2nd Annual Small Business Conference: Excellence in Energy with Small Businesses	Las Vegas, NV	www.bechtelnevada.com/SBAconf/index.htm
21-22	Fundamentals of Energy Management	Memphis, TN	Sponsored by FEMP and Association of Energy Engineers www.aeecenter.org/seminars
26	Congressional Fuel Cell Exposition	Washington, DC	Cannon Caucus Room, 345 Cannon House Office Building 11:00 am to 3:00 pm. For more info: gdolan@usfcc.com
26-27	Environmental "Cradle to Grave" Analysis of Fuel Cell Applications Workshop	Cincinnati, OH	Hosted by EPA National Risk Management Research Laboratory. For more info: lisa.e.mahoney@saic.com
27	USCHPA Annual Meeting and Policy Day	Washington, DC	www.nemw.org/uschpa/PolicyDay0601.htm
27-28	TN Wind Workshop	Knoxville, TN	W. Dwight Bailey 404-562-0564

JULY 2001

9-13	4th International Symposium on New Materials for Electrochemical Syst.	Montreal, Quebec	www.newmaterials.polymtl.ca/eng/congres
10-12	Gas Storage Workshop	Kingston, Ontario	David Quinn; quinn-d@rmc.ca
11-12	FuelCell Investor Conference	Portland, OR	Www.srinstitute.com/cr201 , or 800-666-8514
16-19	2001 National Workshop on State Building Energy Codes	Burlington, VT	www.eren.doe.gov/buildings/codes_standards/buildings/2001natl_workshop.html
24-27	ACEEE Summer Study	Tarrytown, NY	www.aceee.org ; Rebecca Lunetta; 302-292-3966
30 - Aug. 1	Green Power Conference	Portland, OR	Tina Kaarsberg, tina.kaarsberg@ee.doe.gov ; megan_maguire@nrel.gov

In the early days of the industry, the DG stations were small, close to the load, and were intended to serve on-site or nearby customers. Many used waste heat.*



CALENDAR OF EVENTS

AUGUST 2001

11-15	NCSL Annual Meeting and Exhibition	San Antonio, TX	www.ncsl.org
21-24	International Energy Program Evaluation Conference	Salt Lake City, UT	608-835-6880; marymcc@tds.net
29-30	Integrated Energy Efficiency Conference and Facilities Management and Maintenance Expo	Cleveland, OH	www.aeecenter.org
29-Sep. 3	IEEC Integrated Energy Efficiency Congress	Cleveland, OH	Sponsored in part by FEMP; www.aeecenter.org

SEPTEMBER 2001

9-14	6th International Conference on Carbon Dioxide Utilization	Breckenridge, CO	Barbara Ferris, 303-275-3781; www.nrel.gov/iccdubi/
11-13	7th Grove Fuel Cell Symposium	London, UK	www.grovetfuelcell.com
16-19	NASEO Annual Meeting	Portland, ME	www.naseo.org/events/annual/default.htm
17-21	Fifth Biomass Conference of the Americas	Orlando, FL	www.fsec.ucf.edu/bioam ; dee_scheaffer@nrel.gov
24-26	Powering the Future—New Strategies and Solutions for Deploying Distributed Power in the Marketplace	Chicago, IL	www.intertechusa.com
30 – Oct. 5	UPEX'01: The Photovoltaic Experience Conference & Exhibition	Sacramento, CA	Jjudd@ttcorp.com; hosted by Sacramento Municipal Utility District; includes distributed energy technologies workshop

OCTOBER 2001

2-3	Midwest Electrical Conference and Expo	Indianapolis, IN	George Howell 800-676-2136, www.electricleagueindiana.org/expo2001/index.htm
14-17	National Center for Photovoltaics Program Review	Lakewood, CO	barbara_ferris@nrel.gov, 303-275-3781
24-26	World Energy Engineering Congress	Atlanta, GA	www.agcc.org (includes CHP Expo www.aeecenter.org)
24-27	Excellence in Building 2001	Orlando, FL	www.eeba.org/conference

NOVEMBER 2001

1-4	World Congress for a Hydrogen Economy	Denver, CO	www.hydrogennow.org
11-14	113th NARUC Annual Convention	Philadelphia, PA	www.naruc.org